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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,340	07/09/2003	Hideaki Kato	T36-156717M/AIO NGB.267	8712
21254	7590	05/18/2005	EXAMINER	
MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			TRAN, CHUC	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SYM

# Office Action Summary

Application No.

10/615,340

Applicant(s)

KATO ET AL.

Examiner

Chuc D. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 2/28/05 have been fully considered but they are not persuasive.

Applicants argue that the patent by Vazan does not teach or suggest rearranging the LEDS to make the characteristic values of adjacent LEDs substantially equal. The Examiner respectfully disagree. The patent by Vazan clearly teach rearranging the LEDS to make the characteristic values of adjacent LEDs substantially equal See (Col. 3, Line 56). Applicants also argue that Vazan does not teach the arrangement of the LEDs in the printbar. The patent by Vazan clearly teach the arrangement of the LEDs in the printbar See (Col. 3, Line 38).

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Vazan (USP. 6,753,897).

Regarding claim 1, Vazan disclose a method of arranging a required number of LEDs, comprising:

- storing characteristic values of each of said LEDs (Col. 6, Line 7) measured in characteristic measurement (Col. 6, Line 13);

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-temporarily keeping said LEDs after storing said characteristic values (Col. 3, Line 60); and

- rearranging said LEDs to make said characteristic values of each adjacent LEDs substantially equal (Col. 6, Line 15) (Col. 4, Line 3).

Regarding claim 2, Vazan disclose that said adjacent LEDs are arranged so that the characteristic value of one LED is not larger than that of another LED (Col. 4, Line 3).

Regarding claim 3, Vazan disclose a predetermined number of the LEDs are rearranged to make said characteristic values of adjacent LEDs substantially equal, after said LEDs are measured and temporarily kept (Col. 6, Line 11).

Regarding claim 4, Vazan disclose that said characteristic value comprises a light intensity of said LEDs (Col. 4, Line 5).

Regarding claim 5, Vazan disclose a method of arranging a required number of light emitting elements comprising:

- storing characteristic values of said light emitting elements (Col. 3, Line 56) measured in a characteristic measurement (Col. 3, Line 42);

- temporarily keeping said light emitting elements after storing said characteristic values (Col. 3, Line 60); and

- rearranging said light emitting elements to make said characteristic values of adjacent light emitting elements substantially equal (Col. 6, Line 15) (Col. 4, Line 3).

Regarding claim 6, Vazan disclose that said adjacent light emitting elements are arranged so that the characteristic value of one light emitting elements is not larger than that of another light emitting elements (Col. 4, Line 3).

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Regarding claim 7, Vazan disclose a predetermined number of the light emitting elements are rearranged to make said characteristic values of adjacent light emitting elements substantially equal, after said light emitting elements are measured and temporarily kept (Col. 6, Line 11).

Regarding claims 8 and 9, Vazan disclose that said characteristic value comprises a light intensity of said light emitting elements (Col. 4, Line 5).

Regarding claims 10 and 11, Vazan disclose that said LEDs are arranged beginning with an LED having a smallest characteristic value of said LEDs to an LED having a largest characteristic value of said LEDs (Col. 5, Line 47).

Regarding claims 12 and 13, Vazan disclose that generating an arrangement sequence on a memory (41) of a computer to make said characteristic values of adjacent LEDs substantially equal (Col. 4, Line 3), wherein said rearranging is conducted based on said arrangement sequence (Col. 4, Line 39).

Regarding claims 14 and 15, Vazan disclose that said temporarily storing comprises ranking each of said LEDs with a temporary number by said characteristic value (Col. 3, Line 56).

Regarding claim 16, Vazan disclose an apparatus for arranging a number of LEDs comprising:

- a characteristic value measuring unit that performs a characteristic measurement on the LEDs to obtain a characteristic value for the LEDs (3, Line 56);
- an arrangement sequence calculation unit that generates an arrangement sequence of the LEDs such that a difference between the characteristic value of adjacent LEDs is minimized (Col. 6, Line 41); and

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- a rearrangement unit for rearranging the LEDs in accordance with said arrangement sequence (Col. 4, Line 3).

Regarding claim 17, Vazan disclose that said rearranging said LEDs comprises sorting said LEDs according to a predetermined algorithm (Col. 5, Line 44)

Regarding claim 18, Vazan disclose that said rearranging said LEDs comprises arranging said LEDs on a tape (Col. 4, Line 36) (Fig. 3).

Regarding claim 19, Vazan disclose that said rearranging said LEDs comprises arranging said LEDs on a palette (Col. 4, Line 36) (Fig. 3).

### ***Conclusion***

**4. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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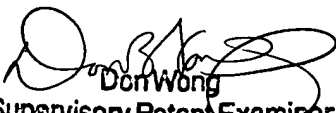
***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuc D. Tran whose telephone number is (571) 272-1829. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC  
May 12, 2005

  
Don Wong  
Supervisory Patent Examiner  
Technology Center 2800